REMARKS

The present Amendment cancels claims 1-8 and 10-14 and leaves claim 9 unchanged. Therefore, the present application has pending claim 9.

In paragraph 2 of the Office Action the Examiner objected to the Drawings under 37 CFR §1.83(a) being that the Examiner alleges that the drawings do not show every feature of the invention specified in the claims. Particularly, the Examiner alleges that the drawings do not illustrate array operation units arranged in the shape of a lattice in a data processing device and updating a band-pixel value in redundant information by summation of the band pixel values transferred from their original positions in the redundant information image. This objection is traversed for the following reasons. Applicants submit that the drawings do in fact clearly illustrate every feature of the invention specified in the claims. Therefore, reconsideration and withdrawal of this objection is respectfully requested.

Specifically, with respect to the arrangement of array operation units in the shape of a lattice in a data processing device, the Examiner's attention is directed to Fig. 13 of the present application. As can be clearly seen in Fig. 13 a plurality of array operation units (AOU) 40 are arranged in the shape of a lattice.

With respect to the updating a band-pixel value in redundant information by summation of band pixel values transferred from their original positions in the redundant information image this feature of the present invention is illustrated, for example, in Fig. 25 as elements S2707-S2712.

Thus, as is quite clear from the above, the features of the present invention as recited in the claims are clearly illustrated in the drawings, thereby complying with

the requirements of 37 CFR §1.83(a). Accordingly, reconsideration and withdrawal of this objection is respectfully requested.

Claim 9 stands rejected under 35 USC §112, first paragraph as allegedly failing to comply with the enablement requirement and also stands rejected under 35 USC §112, second paragraph, as being indefinite. With respect to both rejections, the Examiner simply alleges that the various means recited in the claims, particularly the means for inputting, means for converting band-pixel information, means for converting a transfer value, means for transferring, means for updating and the means for outputting, are not discussed in detail in the specification so as to describe how each of the functions performed by each of the means is accomplished. Applicants traverse these rejections and submit that the specification clearly describes how to accomplish the functions performed by each of the above noted means. Therefore, reconsideration and withdrawal of these rejections is respectfully requested.

With respect to the means for inputting a band-pixel value in the rough-edge information image Applicants submit that this means is realized for copying the band-pixel value in the rough-edge information image at any memory element to a specific memory element. This element as recited in the claims are well known by those of ordinary skill in the art, for example, as illustrated and discussed at page 32 lines 7-19 of the reference "Pattern Description with a Highly Parallel Information Processing System I, by A. Tojo, Denkishikenjo Ihou, Vol.31, No.8, pp.18-34, 1967, which was cited in the March 9, 2001 Information disclosure Statement.

With respect to the means for converting the band-pixel information in the

rough-edge information image to a band-pixel value in a redundant information image Applicants submit that this means is realized by copying the band-pixel information in rough-edge information image to a specific memory element, the number of the bits thereof is enough for representing a maximum value of the band-pixel value in the redundant information image. This means is well known to those or ordinary skill art as illustrated and discussed, for example, at page 482, lines 2-21 of the reference "Pattern Description with a Highly Parallel Information Unit (VI) - Construction and Simulation of the System", by A. Tojo, et al. Denkishikenjo Ihou, Vol.33, No.5, pp.479-505, 1969, which was cited in the March 9, 2001 Information disclosure Statement.

The means for converting a transfer value derived from the redundant information image to a band-pixel value in a transfer value image by operating imagery of position is realized by calculating a function such as, for example, equation 28 on page 71 of the specification of the present application by a processor in a data processing device. Thus, according to the present invention, this means can be accomplished by a digital system including any type of single processor computers and any type of multiple processor computers as described on page 62, line 16 through page 63, line 10 and in the passage beginning on page 111, line 19 through page 112, line 13 of the specification of the present application.

The means for transferring the band-pixel value in the redundant information to a transfer position directed by the band-pixel value in the transfer value image is realized by judging which AOU satisfies a condition of a function such as, for example, equation 31 on page 71 of the specification of the present application or,

for example, a function such as represented by equation 32 on page 72 of the specification of the present application, for the pixel-band value in the redundant information image and transferring the pixel-band value to the AOU by a processor in a data processing device. This type of processing is well known to those ordinary skill art as illustrated and discussed, for example, at page 729, column 2, lines 21-36 of the reference "CLIP-4: A Large Scale Integrated Circuit Array Parallel Processor", by M.J.B. Duff, Proc. 3rd IJCPR, pp.728-733, 1976, which was cited in the March 9, 2001 Information Disclosure Statement.

The means for updating the band-pixel value in redundant-information image by summation of the band-pixel values transferred from their original positions in the redundant information image is realized by calculating the summation according to a function such as, for example, represented by equation 32 on page 72 of the specification of the present application and copying the summation to a memory element of the redundant information image in the same AOU.

The means for outputting the band-pixel value in the redundant information image is realized by copying the band-pixel value in the redundant information image at any memory element to a specific memory element. This means is well known to those ordinary skill in the art, for example, as illustrated and discussed at page 32 lines 7-19 of the reference "Pattern Description with a Highly Parallel Information Processing System I, by A. Tojo, Denkishikenjo Ihou, Vol.31, No.8, pp.18-34, 1967, which was cited in the March 9, 2001 Information disclosure Statement.

Thus, as is quite clear from the above, the specification clearly provides sufficient details so as to enable one of ordinary skill in the art to make and/or use

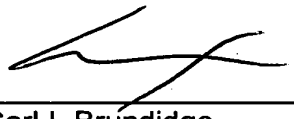
the present invention as recited in the claims and to permit the public to clearly define the meets and bounds of the present invention as recited in the claims. Therefore, reconsideration and withdrawal of the 35 USC §112, first and second paragraphs rejections is respectfully requested.

Applicants note that the only rejections with respect to claim 9 are the above described rejections under 35 USC §112, first and second paragraphs. Since these rejections have been overcome as indicated above, claim 9 is now in condition for allowance. Accordingly, early allowance of the present application based on claim 9 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (1089.39666X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



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